

AGROSTIS PERENNANS (POACEAE), A REMOTE DISJUNCTION IN THE PACIFIC NORTHWEST

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Agrostis perennans (Walt.) Tuckerm. is an extremely polymorphic taxon in the eastern United States, with many different ecotypic and morphological forms having been described. While it has been reported from all states east of the Mississippi River and three states immediately to the west (*Hitchcock*, 1950), I am reporting it here for the first time from the Pacific Northwest.

A collection of an *Agrostis* (*Carlbon Ac-73*, OSC) from a mesic, semi-shaded site in the dense coastal *Pseudotsuga*—*Tsuga* forest approximately two miles east of Copalis, Washington, and an early Thomas Howell collection from Tillamook, Oregon (*Howell, s.n.*, 1884, ORE), identical to it, were compared with a range of specimens from the eastern United States, including ten holotypes of names considered synonyms with *A. perennans* by Hitchcock. These two western collections were identical with the eastern material in the usual spikelet characters as well as in the trichodium-net development.

Five S_1 plants (OSC) and cloned material of *Ac-73* were morphologically indistinguishable from one another when grown under uniform garden conditions. Cytological studies of meiosis in pollen mother cells of *Ac-73* and two S_1 plants revealed no meiotic irregularities, with normal bivalent pairing (21 II) in all cells investigated. The haploid chromosome number, $n = 21$, agrees with root-tip counts ($2n = 42$) reported by Björkman (1960) for collections of *A. perennans* from eastern Canada.

Agrostis perennans is possibly a relict species in the Pacific Northwest, having had previously a more or less continuous east-west distribution as late as the Pleistocene.

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LITERATURE CITED

- BJÖRKMAN, S. O. 1960. Studies in *Agrostis* and related genera. Symb. Bot. Upsal. 17: 1-112.
HITCHCOCK, A. S. 1950. Manual of the grasses of the United States. Ed. 2, revised by Agnes Chase, U.S. Dept. Agr. Misc. Publ. 200.